## THE ETYMOLOGY OF 'BRAIN' AND COGNATES

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The English word *brain*, whose etymology is the subject matter of the present article, has cognates in Frisian, Dutch, Low German, and Rhenish Franconian (see *brain*, *Brägen* ~ *Bregen*, and *brein* in etymological dictionaries of English, German, and Dutch and also Ten Doornkaat Koolman 1879-84, s. *Brägen*; Stapelkamp 1950, and Lerchner 1965:48). The hypotheses on the origin of *brain* are not many. Minsheu<sup>1</sup> compared *brain* with Gk<sup>2</sup> φρήν, a noun used predominantly in the plural and having several meanings: 'diaphragm; chest; heart' and 'mind; thought'. *Brain* and φρήν sound alike, and the gloss 'mind' in Greek dictionaries suggested to Minsheu a link between them. His suggestion irritated the otherwise courteous Junius, who called its author *vir minime indoctus*. Yet as late as 1839, Kaltschmidt, a man of great learning, mentioned φρήν in the entry *Brägen*.

Helvigius was evidently the first to relate *G Brägen*, which he knew in the form *breeam* (= [brɛ:əm]?) to Gk  $\rho \epsilon \gamma \mu \alpha$  'top of the head; fontanel'. He wrote: "breeam / cerebrum, ab humiditate sortitum nomen.  $\rho \epsilon \gamma \omega$  enim est humenectare, irrigare. Hinc  $\beta \rho \epsilon \gamma \mu \alpha$  synciput vocatur." His idea goes back to antiquity. The Greeks thought that  $\beta \rho \epsilon \gamma \mu \alpha$  and its doublet  $\beta \rho \epsilon \gamma \mu \alpha$  were akin to  $\beta \rho \epsilon \gamma \mu \alpha$  'to wet, moisten' because in infants the fontanel is wet or moist (the association is due to folk etymology: see Frisk and Chantraine, s. v.). Skinner, possibly independent of Helvigius, also traced *brain to*  $\beta \beta \epsilon \epsilon \gamma \mu \alpha$ . Many influential philologists, Junius, Wachter (s. *Bregen*), Diefenbach (1851: 325), Webster, Kaltschmidt (s. *Brägen*), and Richardson among them, supported Skinner, whose dictionary enjoyed greater popularity than Helvigius's.

However, a few other suggestions have been offered from time to time. Schwenck (s. *Bregen*) pondered the derivation of *G Bregen* from *G Brei* 

'mush, paste; porridge' – not a bad idea, considering what the brain looks like. He did not insist on his derivation; in fact, he stressed its tentative character. Kaltschmidt rejected the Bregen ~ Brei connection with indignation, but Mueller, an exceptionally cautious researcher, found it worthy of note. Richardson, inspired by the Greek etymology of  $\beta\beta\epsilon\gamma\mu\alpha$ , put forward the hypothesis that brain is a development of \*be-rægn, with ber- being pronounced br- and -rægn standing for OE regn 'rain'. MacKay, who believed that most English words are traceable to Gaelic, offered Gael. breith 'judgment, wit, imagination, decision' as the etymon of brain (only Stormonth copied his etymology). May (s. Brägen) cited OI brýnn, which he mistranslated as 'forehead' (brýnn is an adjective; the Icelandic for 'forehead' is brún) and OI brogðóttr 'cunning' (it would have been easier to refer to bragð 'deceit') and wondered whether G (sich) einprägen 'to impress' could be a variant of \*(sich) einbrägen from Brägen. The last conjecture is ingenious but indefensible despite the obscurity that envelops the origin of *prägen*. Mueller, who gave *Brei* and  $\beta \rho \epsilon \gamma \mu \alpha$  as uncertain cognates of brain, added G Broden 'foul smelling vapor' to his short list of possibly related words (Broden is akin to E breath). Those suggestions are now forgotten. It would be more appropriate to say that, except for Schwenck's, none of them has ever been remembered.

More recently, Makovskii (1986:47-48 and 2000, s. v.) has offered a string of fantasies typical of all his etymologies. He begins by saying that in the anthropomorphic picture of the universe the brain is a symbol of the World Reason, which is related to the concept of a rising flame. He cites the roots *\*bhreg-* 'to burn, shine' and *\*bhā-* 'to burn' and obtains OE *brægen* 'brain' from the sum *\*bha-* (< *\*bhū-* 'to be') + *\*arg-, \*areg-* 'to burn, shine' (so in the 2000 work). In 1986, he gave *\*bhreu-* 'to boil; to ferment; violent, passionate' as the etymon of *brain*. Both entries contain E *brag, brochan* 'gruel, thin porridge', *bragget* 'honey and ale fermented together', and many other words from Sanskrit, Greek, and Lithuanian, among oth-

ers, as related to *brain*. According to Makovskii (1986), E *marrow* (< OE *mearg*) has the same root as *brain* (his sole supporter in this respect appears to be Jay Jasanoff; Katz 1998: 211, note 77). In contemporary linguistic literature, Partridge liked such bold hypotheses. See the end of his entry *brain*: "IE r[oot] ? *\*breg(h)-;* r[oot] \* *bherg(h)* would also account for G (*Ge)hirn*, OE *hiarni* [Patridge means OI *hjarni*], brain, for *hirn*, etc., may well be metathetic for *\*hrin-.*"

The next chapter in the investigation of *brain* ~ *Brägen* ~ *brein* began with Graßmann (1863a: 93, 118; 1863b:121; the main statement is on p. 93). Graßmann, one of the best informed philologists of his time, could not have been ignorant of the dictionaries everyone consulted in the middle of the nineteenth century, so that his comparison of OE *brægen* with Gk  $\beta\beta\epsilon\gamma\mu\delta\varsigma$  was not his discovery, but he added a semantic justification for bringing the two words together. In his opinion, the meaning of their root was 'to enclose, cover', as in Go. *bairga*- (the first component of *\*bairgahei* 'mountainous region'). The alleged parallel Go. *\*bairnei* 'skull' ~ OI *hjarni* 'brain' allowed him to conclude that the word *brægen* got its meaning from the name of the head or skull.

After the publication of Graßmann's article, references to Skinner (let alone Helvigius) disappeared, which is unfair, as is made especially clear by the history of Webster's and Skeat's dictionaries. Noah Webster (1828) cited  $\beta \rho \epsilon \gamma \mu \alpha$  among the cognates of *brain* (see above). Later editors left the etymological part of his entry intact; only in 1890 *perhaps* was added to it and in 1961 deleted. Continuity was restored, but the seemingly uninterrupted tradition consists of two periods: from Helvigius and Skinner to Graßmann and from Graßmann to the present. Although the Germanic-Greek connection has survived, the substance of the old etymology has changed, and, as we will see, more than once. Skeat also mentioned  $\beta \rho \epsilon \gamma \mu \alpha$  and  $\beta \beta \epsilon \gamma \mu \alpha \zeta$  in 1882 and without changes in 1910 and created the impression that no progress had been made in the study of the word *brain* between those two dates.

In the year in which perhaps enriched the entry in Webster's dictionary, Johansson (1890: 448) reexamined the pair OE brægen ~ Gk βρεγμός and decided that the original sense of the root underlying them was not 'to enclose, cover' but 'to jut out, project'. He interpreted βρεγμός as something protruding, sticking out and gave Gk kópon 'cheek, temple', Skt *śirṣan* 'head', and (in a different grade of ablaut) Gk άργω 'to begin; go forward' as cognates. According to Johansson, another line leads from brægen to OE brego 'to rule'. He also mentioned OI bragr 'poetry' but left open the question of its origin. Several of Johansson's predecessors believed that Greek and even Germanic br- could go back to \*mr. Johansson was of the same opinion and reconstructed \*mrgho- as the etymon of βρεγμός and *brægen* (but he did not combine *brægen* and *mearg* 'marrow'). Osthoff (1890: 92) endorsed Johansson's reconstruction and devoted a long article to the putative reflexes of PIE \*mr-. Johansson-Osthoff's etymology of brain is a familiar part of many post-1890 dictionaries, including Fick<sup>4</sup> (p. 279), WP (II: 314), and IEW (p. 750; severely abridged in comparison with WP). See also Zupitza (1896: 136 and 1900: 242), Kluge (EWDS<sup>5</sup>, s. Brägen, and 1913:80, sec 68, where brægen is given as the only example of the change br < ?mbr), and Wood (1912-14: 316/9). The only small addition is Benveniste 1931. He cited Avestan mrzu- 'occipital bone, nape of the neck', a form presumably related to brain.

Judging by the surveys in GI (1984: I, 813, note 1 = 1995: I, 712, note 24, continued on p. 713) and in a 1981 dissertation on the Germanic names of body parts (Egger 1981: 35-36), no one has offered new ideas on the ety-mology of *brain* since 1890. Wyld gives a lucid summary of the problem, and I will quote it below in full (UED, *brain*).

OE bræġen, breġen, M. E. brain, O. Fris. & Du. brein; cp. also O. E. brego, 'prince, king'; prob. cogn. w. Gk. brekhmós, brégma, 'top of the head', if this, as is suggested, stands for earlier \*mreghmó, Pr. Gmc. \*mregn-, of wh. the full form wd. be \*mereghn-. It is further suggested that from a form of the same base w. different gradation in both syllables \*mrgh-, the Gk. arkhós, 'leader, chief', árkhō, 'I begin', arkhē, 'beginning, cause' &c. are derived.

Watkins (AHD, p. 1530, *mregh-mo-*) reproduces Pokorny's etymology. A few good dictionaries, including CD and Weekley, list the Germanic cognates of *brain* and venture to go no further. The Oxford dictionaries, which follow the O.E.D., and Webster are satisfied with Skinner and ignore the *br-* ~ *mr-* relationship. Persson (1912:35) did not object to Osthoff's treatment of *brain*, traced OE *brego* and OI *bragr* 'first, foremost' to the root (or basis, as he called roots) \**bheregh-* 'to jut out, project' but admitted that they could "have been influenced" by that root, which is tantamount to saying that the association between *bragr*, *brego*, and *brægen* with \**bheregh-* might be due to secondary processes. I am aware of a single critique of Johansson-Osthoff's etymology. Polomé (1986:185/21) pointed out that no examples testify to the change \**mr-* or \**mbr-* to \**br-* in Early Germanic.

A side product of the *brægen* –  $\beta \rho \epsilon \gamma \mu \alpha$  etymology is the suggestion that OE *brægen* also meant 'hill', even though that meaning is now preserved only in place names. Ekwall (s. *Brāfield on the Green*) says that the first element of *Brāfield* is probably *brain* 'the crown of the head' and "in transferred use" 'hill'. Smith (1956, I: 46) did without *probably*. Wakelin (1971 and especially 1979) pointed out that OE *brægen* had a rare doublet *bragen*. He also believed that *Bragenfeld*, *Braufeld*, *Brahefeld*, *Bramfeld*, and so on contained the element \**bragen* 'hill'. His conclusion is unobjectionable, but it does not follow that \**bragen* 'hill' has anything to do with *bragen* 'brain'. Several Old and Middle English *br-g* words may have been the etymon of *Bragen-*. For example, Ekwall gives *Bray* < OE *brēg* 'brow'; see also Sw.

*Bråviken* and *Bråvalla*, discussed by Adolf Noreen and cited in AEW, at *brá* 1. Holthausen (1942:36/32) imprudently adduced OSw. *Bragnhem* (> *Bragnam*, a modern Swedish place name) as proof that E *brain* does have a Scandinavian cognate. The only justification for ascribing the meaning 'hill, elevated place' to OE *brægen* ~ *bragen* is the time-honored etymology of *brain*, but that etymology is hardly correct. \**Bragna-*, a word that must have existed before the Anglo-Saxon colonization of Britain, had no currency outside the northern German-Frisian area (whence its reflexes in Low German, Dutch, Frisian, and English), and its kinship with Gk βρέγμα ~ ββεγμός is unlikely.

In 1961, Yu. V. Otkupshchikov brought out an article on the Irish word *bran* 'chaff, bran'. I believe that his conclusions can also be used for the clarification of the origin of *brain*. E *bran* is a borrowing, but its source has not been determined. Old French had *bran* 'bran', whereas Modern French has *bran* 'excrement, muck, filth'. The earliest meaning of OF *bran* seems to have been approximately '\*refuse, rejected matter' because in Modern French bran is usually called *bran de son* rather than simply *bran (son also means 'bran', a synonym of bran from a different part of the French speaking area, so that <i>bran de son* is a tautological phrase, 'bran of bran'). *Bran de scie* means 'saw dust' (*scie 'saw'*). Otkupshchikov contends that *bran 'bran' excrement' are different words the form of which coincided in later French, but here he may be mistaken.* 

A synonym of OF *bran* was *bren*, whence Mod. F. *breneux* 'soiled with feces'. Old Spanish and Provençal also had *bren*. Mod. Sp. *braña* 'summer pasture' developed its meaning from 'leaves or pieces of bark on the ground'. The Breton cognate of Irish, Welsh, and Gaelic *bran* is *brenn*. In Anglo-Latin, *brenn(i)um* and *brannum*, with the same alternation  $|e| \sim |a|$ , have been recorded, and, as Wakelin showed, a rare Old English doublet of *brægen* was *bragen*. The Romance words and E *bran* may have been bor-

rowed from Celtic, and this is what most dictionaries say, though von Wartburg (FEW) points out that the Celtic etymology of *bran* does not answer all questions. On the other hand, the source of E *bran* may have been Old French, and the Celtic words may have been borrowed from French or English. Otkupshchikov reasons that, in Romance, neither *bran* nor *bren* has even a tentative etymology, whereas the Celtic forms can be explained without any difficulty. He reconstructs PIE *\*bhrag-no-* '(something) broken', with the specialized meaning *\**'flour together with bran; grain ground by a millstone', later 'bran'. He concludes that *bran* is a native Celtic word and points out that the phonetic development of *\*bhragno-* to *bran* is parallel to that of *\*ueghno-* to Ir. *fen* 'cart' and of at least two more words.

Otkupshchikov did not know that the Germanic etymon of *brain* had been reconstructed as *\*bragna-*, a form identical with his PIE *\*bhragno-*. Apparently, *pace* von Wartburg, Celtic *\*bragna-* existed. It was a *"low"* word for 'refuse', perhaps 'rubbish'. Its expressive character made it popular among the Celts' Germanic and Romance neighbors. Those who borrowed *\*bragna-* had often seen heads split with a sword and the brain, the refuse of the skull, as it were, oozing out. They had also seen the inside of animals' heads and got the same impression: an unpleasant looking gray mass, whose function in the organism did not bother them.

Glossing the etymon of *brain* as 'refuse' will seem to most people bizarre, but a look at a few other words for 'brain' may dispel doubts on that score. One of such words is G *Hirn* (< OHG *hirni* ~ *hirn*). On the strength of MDu *hersene*, Seebold (EWDS<sup>21-24</sup>) gives the protoform of *Hirn* as *\*hersnja-* or *\*herznja-*. OHG *hirni* and OI *hjarni* (with *ja* < *\*e*) supposedly lost *z* between *r* and *n* (see also NEW: *hersenen*), but it is equally probable that *-z-*, or rather *-s-*, was a suffix *hirni* and *hjarni* never had. Mitzka (EWDS<sup>20</sup>) cites G *Hornisse* 'hornet', besides Du *horzel*, both allegedly going back to *\*hurzu-*, as another example of a spirant in *rzn* ~ *rsn* from *\*r(r)n*. Seebold expunged reference to *Hornisse* in the entry *Hirn*. He is also less certain than were his predecessors that OI *hjarsi* ~ *hjassi* 'crown of the head' are related to *Hirn* and *hjarni*.

Only one point has not been contested: *Hirn*, all books tell us, acquired its meaning from a word meaning 'skull', as shown by its apparently unshakable cognates L *cerebrum* 'brain' and Gk  $\kappa \rho \alpha v i o v$  'skull, cranium'. Despite the consensus, that etymology may be less secure than it seems. G *Harn* (< MHG < OHG *harn*) means 'urine', but its original meaning was at one time \*'bodily waste', as suggested by MHG *hurmen* 'fertilize, spread manure over a field'. Its likely cognates (with *s-mobile*) are OI *skarn*, OE *scearn* 'dung, muck', and L *ex-cer-mere* 'to separate' (akin to *ex-crē-mentum* 'excrement'). *Hirn* (with *i* < \**e*) – *Harn* – *hurmen* form a perfect triad.

OI hjarni had a synonym heili. Its origin is unknown. The cognates proposed by older etymologists are unconvincing (AEW, s. v.). Magnússon (s. v.) suggests its kinship with OI hárr 'gray' (< \*haira-; he traces heili to \*hailar- or \*hailia-) and glosses the protoform as 'gray matter'. The Germanic words for 'marrow' (OE mearg, OI mergr, and so on) have been shown to derive from the root \*mozgo-, whose Proto-Slavic reflex was \*mozgu- 'brain'. If Petersson's comparison of \*mozgo- with the cognates of E mast 'fruit of forest trees as food for pigs' is right (1915:125-6), the original meaning of *mozgo-* was *fat*. Marrow looked like fat (gray substance) to those people. (However, Sverdrup (1916:41) perhaps went too far in believing that the existence of so many words related to mearg ~ mergr testifies to the early Indo-Europeans' proficiency in cooking meat.) Slavic is rich in similar sounding but apparently unrelated words containing the consonantal complex m-zg. (ESSI XVIII:223-25, \*mězga; XX:94-96, 202-03, \*mozgu, \*muzga / \*m''zgu, and XXI:19-20, \*m''zga / \*m''zgu). The incompatibility of their Germanic cognates is equally obvious. For example, we have\*mazga- 'marrow' and \*maisk-, as in E mash ~ G Maisch, but a and ai belong to different ablaut series, which makes the reconstruction of the

protomeaning of \**mazga*- as \*'pulp' impossible. Still it is curious to observe Russ. *mozg* 'brain' coexisting with Russ. dial. *mozg* 'humid air' and the adjective (*pro*)*mozglyi* 'dank', as though the brain (*mozg*) were a wet mass. Some etymologists gloss even Gmc \**mergh*- as 'mass, lump, bunch' (Arnoldson 1915:6/2.03, with references).

Baskett (1920:50, no. 39 A1) cites E dial. *pash* 'brain', a word defined as 'rotten or pulpy mass; mud and slush'. The idea of the brain as a mass is sometimes emphasized by the use of the corresponding words in the plural. In Russian, only the plural (*mozgi*, stress on the second syllable) denotes the dish brains, which is also the case in English. In German, the situation is different: the dish is *Hirn*, while the organ is more often *Gehirn*, a collective noun. Ten Doornkaat Koolman was wrong in connecting *Brägen* directly with *brechen*, but his idea that the brain was at one time understood as something broken into small pieces or something squeezed together testifies to his sound linguistic instinct. He also quoted the saying *Er hat keine Grütze im Kopfe* (literally 'He has no porridge in his head'), said about a stupid, brainless person. *Grütze* in this context is not unlike E dial. *pash* and *G Brei*, which Schwenck offered as a cognate of *Brägen*.

Buck (1949:213/4.203) states: "Most of the words for 'brain' are cognate with words for 'head' or 'marrow'." Germanic words do not confirm the first part of his rule. No common Indo-European name of the head and no common Germanic name of the brain existed. In the Scandinavian area, *hjarni* competed with *heili* ~ *heilir*. The usage in the mythological poems of the *Elder Edda* suggests that *heili* was the most ancient or most dignified word for the gray mass in the head. The primordial giant Ymir had a *heili* (the sky was made from it), not a *hjarni*. Perhaps the home of the etymon of *hjarni* should be sought to the south of the Scandinavian peninsula. Gmc \**mazga*- probably also first meant 'brain'.

Learned coinages and local words must have existed at all times. One of them was OE *ex(e)* 'brain', the origin of which is unknown (from *axe*, a

variant of asce 'ashes' - 'ash-colored substance'?). When synonyms meet, they clash and narrow down their meaning, unless one of them disappears. A typical example from the field of organs and body parts is the Old English names of blood. Blod was a generic term, dreor occurred only in poetry, and, as its etymology shows, first meant \*'stream of blood gushing from a wound' (OE dreosan 'to fall'), and heolfor, another poetical word, meant 'coagulated blood'. The metaphorical nature of *swāt* 'sweat; blood' is obvious, but swatan 'to bleed' was not restricted to poetry. Of those words only blood continues into the present; dreor and heolfor have left no traces, while sweat is now only 'sweat'. Likewise, heili is lost in the continental Scandinavian languages (Norw. and Dan. hjerne, and Sw. hjärna are reflexes of hjarni) but survives in Modern Icelandic, in which *hjarna*- occurs in a few compounds; there is also *hjarni* 'skull'. In addition to mergr, Old Icelandic had mana (> Mod. Icel. mana), related to manir 'ridge of the roof' and E mane, the original sense being evidently \*'spine'. It is now a term used in describing vertebrates.

Fris. *harsens* and Du *hersens* suggest that the prospective invaders of Britain also had a similar word. A late (1137) Old English hapax *hærn* 'brain' is hardly native, and E dial. *harns*, as well as ME *hærnes*, *harnes*, and *hernes*, is from Scandinavian. Early in their history, speakers of northern German and Frisian seem to have borrowed a "low" Celtic word that with time lost its slangy character. In Frisian and Dutch, it edged out the inherited name of the brain, whereas in Standard English it ousted the cognates of *harsens* ~ *hersens*. The doublets OE *brægen* ~ *bragen* may owe their origin not to some vagaries of the dialectal phonetics of Old English but to the existence of a similar pair in the lending language. To sum up, if my reconstruction has any merit, *brægen* and *bragen* were taken over from the Celts with the humorous meaning '\*refuse, rubbish, waste matter', acquired the meaning 'brain', competed with \**harn*-, and eventually won out, but they never meant 'elevated place, hill'. I realize how feeble my brain child is, but perhaps my esteemed colleague Arne Zettersten will treat it with condescension. At birthday parties, one often hears people saying, after they have unwrapped their presents: "It's the thought that counts." If we had no brain, however junky, there would have been no thoughts (and no *festskrifter*).

## Notes

1. In dictionaries of English, the relevant information will be found s. *brain*. Dictionaries are cited in this article without dates; see the bibliography.

2. The following abbreviations are used below: Dan. - Danish, dial. - dialectal, Du -Dutch, E - English, F - French, Fris. - Frisian, G - German, Gael. - Gaelic, Gk - Ancient Greek, Go - Gothic, Icel. - Icelandic, Ir. - Irish, L - Latin, MDu - Middle Dutch, MHG - Middle High German, mod. - modern, Norw. - Norwegian, OE - Old English, OF - Old French, OHG - Old High German, OI - Old Icelandic, OSw. - Old Swedish, PIE - Proto-Indo-European, Russ. - Russian, Sp. - Spanish, Sw. - Swedish.

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Abbreviation: KZ = (Kuhn's) Zeitschrift für vergleichende Sprachforschung.

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